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Rent-Seeking through Collective Bargaining

Teachers Unions and Education Production

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There is a growing consensus that increasing school district funding can lead to better education outcomes, but how teachers' unions affect these returns to spending is unclear. Teachers may be committed to imparting knowledge and skills, but they also seek better salaries, benefits, and work conditions. Critics of teachers' unions often cite such rent-seeking to argue that empowering teachers to bargain collectively for compensation undermines public education. Whether this argument holds depends on teachers' and administrators' relative understanding of education production and the extent to which they prioritize student achievement. If teachers are more inclined to prioritize student learning or understand education production better than administrators, then teachers' influence through collective bargaining could increase efficiency.

Unfortunately, we lack conclusive empirical evidence on whether teacher rent-seeking impacts education production. Studies that leverage the enactment of duty-to-bargain laws are limited because student achievement data are unavailable going that far back, whereas studies that estimate the more recent impact of collective bargaining on student achievement generally lack plausibly exogenous variation in union-district bargaining. Even studies that largely overcome these limitations cannot speak to the efficiency of union-induced spending.

Our study addresses these limitations by estimating the contemporary impact of teacher collective bargaining on revenue allocation and student achievement, holding fixed all other district differences (e.g., revenue levels). Specifically, using data on thousands of tax referendums held across Ohio school districts from 1995 to 2019, we use a model designed to estimate the impact of just passing a tax levy—as compared with just failing to pass a tax levy—on collective-bargaining agreements (CBAs), resource allocation, and student achievement. In particular, we compare the effect of obtaining this new tax revenue just before a CBA is set to expire—in the

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midst of collective bargaining—with the effect of obtaining this tax revenue well before the next scheduled round of negotiations. Essentially, because districts largely commit revenue to operational functions in the summer immediately following a tax referendum, there are limited resources for unions to bargain over if collective bargaining is scheduled to take place at a time other than the summer immediately following the referendum. Importantly, we find that the precise timing of local tax levies (relative to scheduled collective-bargaining negotiations) is plausibly random. Thus, comparing the impact of tax elections held at different times relative to collective-bargaining negotiations should reflect the effect of union pressure on resource allocation and student achievement.

Our analysis of CBAs yields imprecise estimates but, as a whole, paints a coherent picture. Unions and districts agreed to higher teacher salaries if collective bargaining occurred while a district decided how to allocate new revenue as opposed to well after a district allocated new revenue. Similarly, CBAs conferred more teacher benefits—such as dental coverage, extended mealtimes, and more sick and personal days—if districts secured and allocated new revenue in the midst of collective-bargaining negotiations. On the other hand, tax passage was more likely to lead to changes in CBA text dealing with work conditions among districts that committed new revenue one year prior to collective bargaining. These results are consistent with research indicating that unions pursue higher salaries and benefits in times of abundance but settle for perks with few or no immediate financial implications when budgets are tight.

Our analysis of school district spending and staffing corroborates the results of the CBA analysis. Districts in which tax levies generated funds in the year leading up to summer CBA negotiations spent more on teacher compensation, spent down their reserves to a greater extent, and hired fewer teachers than districts that allocated new tax revenue well before negotiating new CBAs. Specifically, although both sets of districts increased overall spending on instructor salaries, districts that allocated new revenue well before collective bargaining spent the money on 10–12 new teachers as opposed to salary increases. Moreover, districts subject to more union pressure in collective bargaining increased spending on teacher benefits to a greater extent (both in absolute terms and as a proportion of district revenues), experienced relative declines in their reserves, and were more likely to pass a new tax when the CBA expired.

Consistent with rent-seeking theory, additional revenue did not lead to student achievement gains among districts that allocated these new funds while in the midst of collective bargaining, but it did among districts that committed new revenue one year prior to collective bargaining. For these districts, relative spending increases of approximately $200 per pupil translated to an increase of annual achievement gains of 0.02 of a student-level standard deviation, for total accumulated gains of around 0.06 student-level standard deviations over the following three years (the typical duration of a CBA). Put differently, districts that allocated funds relatively free of collective-bargaining pressures were more efficient, realizing an extra 0.002 standard deviations in student-level achievement gains for every $1,000 in annual per pupil expenditures.

To our knowledge, this study provides the most direct test of rent-seeking theory as it relates to collective bargaining over teacher compensation and its impact on student achievement, confirming more suggestive evidence from recent studies. The study also illustrates a mechanism through which collective bargaining leads to greater educational spending, as districts subject to union pressure subsequently raised taxes further—ostensibly because they committed to unsustainable teacher compensation levels. Finally, the study contributes to the growing literature on school district collective bargaining with the analysis of decades of CBAs, providing evidence that in the absence of available funds, unions and districts negotiate changes to work conditions instead of salaries and benefits.

This research brief only reflects the opinions of the authors and not those of the U.S. Treasury Department.

NOTE

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